

Notice of Allowability	Application No.	Applicant(s)	
	10/566,334	CHELLAPPA ET AL.	
	Examiner	Art Unit	
	MARIANNE L. PADGETT	1717	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/21/11 & interview of 9/12/11.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 1,3,8-10,12,16-18,21-23,25-29,33-35,37,38,40-42 and 45-58.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>Attached</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

/MARIANNE L. PADGETT/
Primary Examiner, Art Unit 1717

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1. An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Matthew Hayden on 9/10/11 (message) & 9/12/2011.

In the specification:

in **[0015]**, on line 5 after "oxygen", insert --(e.g. between about 10^{-2} atm and 10^{-5} atm)--; and on line 6 after "atmosphere", insert --(e.g. less than about 10% hydrogen by weight)--.

In **[0073]** (see 3/14/11 amendment to the specification), in the last line thereof, change "thereon." to --thereon, were localized sintering is of the coating and not an underlying support. --.

In the claims:

in **claim 54**, in line to after "comprises" insert -- conducting the sintering in N_2 by --;
in line 3 after "minute" insert -- to a soak temperature of 850°C or 900°C or 950°C --;
in line 4 change "soaking; and" to -- soaking for 1 hour; then --; and
in line 5 change "per hour" to -- C per minute --.

2. The following is an examiner's statement of **Reasons for Allowance**: applicants' 6/21/11 amendment has corrected clarity and support issues, as set forth in sections 3 & 4 of the action mailed 3/22/11, with the objections in section 2 corrected by the amendments to the specification and the replacement sheet for the drawings. Furthermore, the additional limitations in the independent claims have differentiated over the previously applied prior art, as set forth in section 6 of the action mailed

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3/22/11, with it particularly noted that the laser writing techniques as set forth in HU (2001/0016236 A1) in that rejection combines both evaporation and sintering into one step, however applicants' specification in [0083] provides teachings suggesting that not performing the two-step technique as now required (e.g. soft baking, defined in the specification & claims as removing carrier components, i.e. solvent, then sintering, where order is necessitated by actions of required in the wherein statements added in the 6/21/11 amendment) would disadvantageously give rise to pinholes & defects inside the coating. Furthermore, applicants' claims as amended now require the process & product to have a particular microstructure produced by the process, which is not found to be suggested by the prior art.

Update of the search did not find any new art that reads on the claims as now written, however **Chellappa et al.** (7,922,781 B2) by overlapping inventors, is considered to be of interest as directed to a process that employs structures related to those claimed & produced in the presently claimed process.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. **Any inquiry** concerning this communication or earlier communications from the examiner should be directed to **Marianne L. Padgett** whose telephone number is **(571) 272-1425**. The examiner can normally be reached on M-F from about 9:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan, can be reached at (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available

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through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marianne L. Padgett/
Primary Examiner, Art Unit 1717

MLP/dictation software

9/12/11